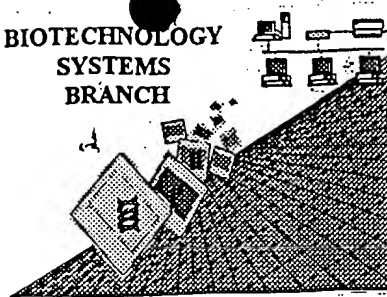


BIOTECHNOLOGY
SYSTEMS
BRANCH



0590
1017

RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/942,252
Source: OIP/E
Date Processed by STIC: 9/18/2001

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.

PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)

PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

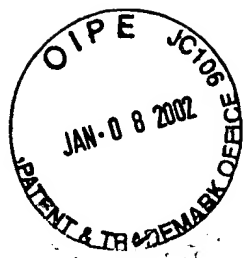
TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER
VERSION 3.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND
TRADEMARK OFFICE WEBSITE. SEE BELOW:

Checker Version 3.0

The Checker Version 3.0 application is a state-of-the-art Windows based software program employing a logical and intuitive user-interface to check whether a sequence listing is in compliance with format and content rules. Checker Version 3.0 works for sequence listings generated for the original version of 37 CFR §§1.821 – 1.825 effective October 1, 1990 (old rules) and the revised version (new rules) effective July 1, 1998 as well as World Intellectual Property Organization (WIPO) Standard ST.25. Checker Version 3.0 replaces the previous DOS-based version of Checker, and is Y2K-compliant. Checker allows public users to check sequence listings in Computer Readable form (CRF) before submitting them to the United States Patent and Trademark Office (USPTO). Use of Checker prior to filing the sequence listing is expected to result in fewer errored sequence listings, thus saving time and money.

Checker Version 3.0 can be down loaded from the USPTO website at the following address:

<http://www.uspto.gov/web/offices/pac/checker>



OIPE

RAW SEQUENCE LISTING
 PATENT APPLICATION: US/09/942,252

DATE: 09/18/2001
 TIME: 11:25:53

Input Set : A:\GENO 2002 Sequence Listing.txt
 Output Set: N:\CRF3\09182001\I942252.raw

Does Not Comply
 Corrected Diskette Needed

3 <110> APPLICANT: Messier, Walter
 4 Sikela, James M
 6 <120> TITLE OF INVENTION: Methods to Identify Polynucleotide and Polypeptide
 7 Sequences Which May Be Associated with Physiological
 8 and Medical Conditions
 10 <130> FILE REFERENCE: GENO 200.2/CIP
 12 <140> CURRENT APPLICATION NUMBER: US/09/942,252
 13 <141> CURRENT FILING DATE: 2001-08-28
 15 <150> PRIOR APPLICATION NUMBER: 09/591,435
 16 <151> PRIOR FILING DATE: 2000-06-09
 18 <150> PRIOR APPLICATION NUMBER: 09/240,915
 19 <151> PRIOR FILING DATE: 1999-01-29
 21 <150> PRIOR APPLICATION NUMBER: 60/073,263
 22 <151> PRIOR FILING DATE: 1998-01-30
 24 <150> PRIOR APPLICATION NUMBER: 60/098,987
 25 <151> PRIOR FILING DATE: 1998-09-02
 27 <160> NUMBER OF SEQ ID NOS: 30
 29 <170> SOFTWARE: PatentIn Ver. 2.0

ERRORED SEQUENCES

1466 <210> SEQ ID NO: 16
 1467 <211> LENGTH: 1207
 1468 <212> TYPE: PRT
 1469 <213> ORGANISM: Homo sapiens
 1471 <400> SEQUENCE: 16
 1472 Met Gln Phe Leu Glu Glu Val Gln Pro Tyr Arg Ala Leu Lys His Ser
 1473 1 5 10 15
 1475 Asn Leu Leu Gln Cys Leu Ala Gln Cys Ala Glu Val Thr Pro Tyr Leu
 1476 20 25 30
 1478 Leu Val Met Glu Phe Cys Pro Leu Gly Asp Leu Lys Gly Tyr Leu Arg
 1479 35 40 45
 1481 Ser Cys Arg Val Ala Glu Ser Met Ala Pro Asp Pro Arg Thr Leu Gln
 1482 50 55 60
 1484 Arg Met Ala Cys Glu Val Ala Cys Gly Val Leu His Leu His Arg Asn
 1485 65 70 75 80
 1487 Asn Phe Val His Ser Asp Leu Ala Leu Arg Asn Cys Leu Leu Thr Ala
 1488 85 90 95
 1490 Asp Leu Thr Val Lys Ile Gly Asp Tyr Gly Leu Ala His Cys Lys Tyr
 1491 100 105 110
 1493 Arg Glu Asp Tyr Phe Val Thr Ala Asp Gln Leu Trp Val Pro Leu Arg
 1494 115 120 125
 1496 Trp Ile Ala Pro Glu Leu Val Asp Glu Val His Ser Asn Leu Leu Val
 1497 130 135 140
 1499 Val Asp Gln Thr Lys Ser Gly Asn Val Trp Ser Leu Gly Val Thr Ile
 1500 145 150 155 160

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1502 Trp Glu Leu Phe Glu Leu Gly Thr Gln Pro Tyr Pro Gln His Ser Asp
1503                               165                               170                               175
1505 Gln Gln Val Leu Ala Tyr Thr Val Arg Glu Gln Gln Leu Lys Leu Pro
1506                               180                               185                               190
1508 Lys Pro Gln Leu Gln Leu Thr Leu Ser Asp Arg Trp Tyr Glu Val Met
1509                               195                               200                               205
1511 Gln Phe Cys Trp Leu Gln Pro Glu Gln Arg Pro Thr Ala Glu Glu Val
1512                               210                               215                               220
1514 His Leu Leu Leu Ser Tyr Leu Cys Ala Lys Gly Ala Thr Glu Ala Glu
1515 225                               230                               235                               240
1517 Glu Glu Phe Glu Arg Arg Trp Arg Ser Leu Arg Pro Gly Gly Gly Gly
1518                               245                               250                               255
1520 Val Gly Pro Gly Pro Gly Ala Ala Gly Pro Met Leu Gly Gly Val Val
1521                               260                               265                               270
1523 Glu Leu Ala Ala Ala Ser Ser Phe Pro Leu Leu Glu Gln Phe Ala Gly
1524                               275                               280                               285
1526 Asp Gly Phe His Ala Asp Gly Asp Asp Val Leu Thr Val Thr Glu Thr
1527                               290                               295                               300
1529 Ser Arg Gly Leu Asn Phe Glu Tyr Lys Trp Glu Ala Gly Arg Gly Ala
1530 305                               310                               315                               320
1532 Glu Ala Phe Pro Ala Thr Leu Ser Pro Gly Arg Thr Ala Arg Leu Gln
1533                               325                               330                               335
1535 Glu Leu Cys Ala Pro Asp Gly Ala Pro Pro Gly Val Val Pro Val Leu
1536                               340                               345                               350
1538 Ser Ala His Ser Pro Ser Leu Gly Ser Glu Tyr Phe Ile Arg Leu Glu
1539                               355                               360                               365
1541 Glu Ala Ala Pro Ala Ala Gly His Asp Pro Asp Cys Ala Gly Cys Ala
1542                               370                               375                               380
1544 Pro Ser Pro Pro Ala Thr Ala Asp Gln Asp Asp Ser Asp Gly Ser
1545 385                               390                               395                               400
1547 Thr Ala Ala Ser Leu Ala Met Glu Pro Leu Leu Gly His Gly Pro Pro
1548                               405                               410                               415
1550 Val Asp Val Pro Trp Gly Arg Gly Asp His Tyr Pro Arg Arg Ser Leu
1551                               420                               425                               430
1553 Ala Arg Asp Pro Leu Cys Pro Ser Arg Ser Pro Ser Pro Ser Ala Gly
1554                               435                               440                               445
1556 Pro Leu Ser Leu Ala Glu Gly Gly Ala Glu Asp Ala Asp Trp Gly Val
1557                               450                               455                               460
1559 Ala Ala Phe Cys Pro Ala Phe Phe Glu Asp Pro Leu Gly Thr Ser Pro
1560 465                               470                               475                               480
1562 Leu Gly Ser Ser Gly Ala Pro Pro Leu Pro Leu Thr Gly Glu Asp Glu
1563                               485                               490                               495
1565 Leu Glu Glu Val Gly Ala Arg Arg Ala Ala Gln Arg Gly His Trp Arg
1566                               500                               505                               510
1568 Ser Asn Val Ser Ala Asn Asn Asn Ser Gly Ser Arg Cys Pro Glu Ser
1569                               515                               520                               525
1571 Trp Asp Pro Val Ser Ala Gly Cys His Ala Glu Gly Cys Pro Ser Pro
1572                               530                               535                               540
1574 Lys Gln Thr Pro Arg Ala Ser Pro Glu Pro Gly Tyr Pro Gly Glu Pro

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1575 545                               550                               555                               560
1577 Leu Leu Gly Leu Gln Ala Ala Ser Ala Gln Glu Pro Gly Cys Cys Pro
1578                               565                               570                               575
1580 Gly Leu Pro His Leu Cys Ser Ala Gln Gly Leu Ala Pro Ala Pro Cys
1581                               580                               585                               590
1583 Leu Val Thr Pro Ser Trp Thr Glu Thr Ala Ser Ser Gly Gly Asp His
1584                               595                               600                               605
1586 Pro Gln Ala Glu Pro Lys Leu Ala Thr Glu Ala Glu Gly Thr Thr Gly
1587 610                               615                               620
1589 Pro Arg Leu Pro Leu Pro Ser Val Pro Ser Pro Ser Gln Glu Gly Ala
1590 625                               630                               635                               640
1592 Pro Leu Pro Ser Glu Glu Ala Ser Ala Pro Asp Ala Pro Asp Ala Leu
1593                               645                               650                               655
1595 Pro Asp Ser Pro Thr Pro Ala Thr Gly Gly Glu Val Ser Ala Ile Lys
1596                               660                               665                               670
1598 Leu Ala Ser Ala Leu Asn Gly Ser Ser Ser Ser Pro Glu Val Glu Ala
1599                               675                               680                               685
1601 Pro Ser Ser Glu Asp Glu Asp Thr Ala Glu Ala Thr Ser Gly Ile Phe
1602 690                               695                               700
1604 Thr Asp Thr Ser Ser Asp Gly Leu Gln Ala Arg Arg Pro Asp Val Val
1605 705                               710                               715                               720
1607 Pro Ala Phe Arg Ser Leu Gln Lys Gln Val Gly Thr Pro Asp Ser Leu
1608                               725                               730                               735
1610 Asp Ser Leu Asp Ile Pro Ser Ser Ala Ser Asp Gly Gly Tyr Glu Val
1611                               740                               745                               750
1613 Phe Ser Pro Ser Ala Thr Gly Pro Ser Gly Gly Gln Pro Arg Ala Leu
1614                               755                               760                               765
1616 Asp Ser Gly Tyr Asp Thr Glu Asn Tyr Glu Ser Pro Glu Phe Val Leu
1617 770                               775                               780
1619 Lys Glu Ala Gln Glu Gly Cys Glu Pro Gln Ala Phe Ala Glu Leu Ala
1620 785                               790                               795                               800
1622 Ser Glu Gly Glu Gly Pro Gly Pro Glu Thr Arg Leu Ser Thr Ser Leu
1623                               805                               810                               815
1625 Ser Gly Leu Asn Glu Lys Asn Pro Tyr Arg Asp Ser Ala Tyr Phe Ser
1626                               820                               825                               830
1628 Asp Leu Glu Ala Glu Ala Glu Ala Thr Ser Gly Pro Glu Lys Lys Cys
1629                               835                               840                               845
1631 Gly Gly Asp Arg Ala Pro Gly Pro Glu Leu Gly Leu Pro Ser Thr Gly
1632 850                               855                               860
1634 Gln Pro Ser Glu Gln Val Cys Leu Arg Pro Gly Val Ser Gly Glu Ala
1635 865                               870                               875                               880
1637 Gln Gly Ser Gly Pro Gly Glu Val Leu Pro Pro Leu Leu Gln Leu Glu
1638                               885                               890                               895
1640 Gly Ser Ser Pro Glu Pro Ser Thr Cys Pro Ser Gly Leu Val Pro Glu
1641                               900                               905                               910
1643 Pro Pro Glu Pro Gln Gly Pro Ala Lys Val Arg Pro Gly Pro Ser Pro
1644                               915                               920                               925
1646 Ser Cys Ser Gln Phe Phe Leu Leu Thr Pro Val Pro Leu Arg Ser Glu
1647 930                               935                               940

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1649 Gly Asn Ser Ser Glu Phe Gln Gly Pro Pro Gly Leu Leu Ser Gly Pro
1650 945 950 955 960
1652 Ala Pro Gln Lys Arg Met Gly Gly Pro Gly Thr Pro Arg Ala Pro Leu
1653 965 970 975
1655 Arg Leu Ala Leu Pro Gly Leu Pro Ala Ala Leu Glu Gly Arg Pro Glu
1656 980 985 990
1658 Glu Glu Glu Glu Asp Ser Glu Asp Ser Asp Glu Ser Asp Glu Glu Leu
1659 995 1000 1005
1661 Arg Cys Tyr Ser Val Gln Glu Pro Ser Glu Asp Ser Glu Glu Glu Ala
1662 1010 1015 1020
1664 Pro Ala Val Pro Val Val Val Ala Glu Ser Gln Ser Ala Arg Asn Leu
E--> 1665 (025)/1025 1030 1035 1040
1667 Arg Ser Leu Leu Lys Met Pro Ser Leu Leu Ser Glu Thr Phe Cys Glu
1668 1045 1050 1055
1670 Asp Leu Glu Arg Lys Lys Lys Ala Val Ser Phe Phe Asp Asp Val Thr
1671 1060 1065 1070
1673 Val Tyr Leu Phe Asp Gln Glu Ser Pro Thr Arg Glu Leu Gly Glu Pro
1674 1075 1080 1085
1676 Phe Pro Gly Ala Lys Glu Ser Pro Pro Thr Phe Leu Arg Gly Ser Pro
1677 1090 1095 1100
1679 Gly Ser Pro Ser Ala Pro Asn Arg Pro Gln Gln Ala Asp Gly Ser Pro
E--> 1680 (105)/1105 1110 1115 1120
1682 Asn Gly Ser Thr Ala Glu Glu Gly Gly Gly Phe Ala Trp Asp Asp Asp
1683 1125 1130 1135
1685 Phe Pro Leu Met Thr Ala Lys Ala Ala Phe Ala Met Ala Leu Asp Pro
1686 1140 1145 1150
1688 Ala Ala Pro Ala Pro Ala Ala Pro Thr Pro Thr Pro Ala Pro Phe Ser
1689 1155 1160 1165
1691 Arg Phe Thr Val Ser Pro Ala Pro Thr Ser Arg Phe Ser Ile Thr His
1692 1170 1175 1180
1694 Val Ser Asp Ser Asp Ala Glu Ser Lys Arg Gly Pro Glu Ala Gly Ala
E--> 1695 (185)/1185 1190 1195 1200
1697 Gly Gly Glu Ser Lys Glu Ala
1698 1205

```

When
numbering
first amino
acid on a line,
begin number
directly under
first letter of
amino acid
e.g. Pro
1025

VERIFICATION SUMMARY

DATE: 09/18/2001

PATENT APPLICATION: US/09/942,252

TIME: 11:25:54

Input Set : A:\GENO 2002 Sequence Listing.txt

Output Set: N:\CRF3\09182001\I942252.raw

L:12 M:270 C: Current Application Number differs, Replaced Application Number
L:13 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:1665 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:16
M:332 Repeated in SeqNo=16